

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously Amended) A cordless communication system, comprising:
a central unit; and
at least two remote units capable of radio frequency communication with said central unit
and other of said at least two remote units, a first of said at least two remote units
being capable of providing a request to said central unit for a direct connection with
a second of said at least two remote units;
wherein said central unit is capable of assigning a dedicated communication channel for
enabling direct communication between selected ones of said at least two remote
units upon receiving a request from said first remote unit, said central unit
assigning a dedicated communication channel for enabling direct communication
between said first and second remote units, said second remote unit synchronizing
to said first remote unit.
2. (Original) The cordless communication system of claim 1, wherein each of
said at least two remote units is further capable of communication with another of said at
least two remote units via a radio frequency connection relayed through said central unit.
3. (Previously Amended) The cordless communication system of claim 2,
wherein each of said remote units synchronizes to said central unit during communication
with said central unit.
4. (Canceled)
5. (Canceled)

6. (Original) The cordless communication system of claim 1, wherein said radio communication comprises time division duplex connections utilizing a time division multiple access (TDMA) scheme.

7. (Original) The cordless communication system of claim 1, wherein said radio communication comprises a frequency hopping spread spectrum (FHSS) scheme and said central unit assigns the dedicated communication channel by assigning a specific hop sequence to selected ones of said at least two remote units.

8. (Original) The cordless communication system of claim 1, wherein said radio frequency communication comprises direct sequence spread spectrum (DSSS) scheme and said central unit assigns said dedicated communication channel by assigning a specific spreading code to selected ones of said at least two remote units.

9. (Original) The cordless communication system of claim 1, wherein said central unit provides an interface for interfacing the communication system with a network.

10. (Original) The cordless communication system of claim 9, wherein the network comprises at least one of a public switched telephone network (PSTN), an integrated services digital network (ISDN), the Internet, and an Intranet.

11. (Previously Amended) A cordless communication system, comprising:
a central unit; and
at least two remote units capable of radio frequency communication with said central unit;
wherein each of said at least two remote units is capable of communication with another of said at least two remote units via a radio frequency connection relayed through said central unit; and

wherein a first of said at least two remote units is further capable of communication with a second of said at least two remote units via a dedicated radio frequency connection assigned by said central unit for enabling direct communication between said first remote unit and said second remote unit, the second remote unit synchronizing to said first remote unit during communication with said first remote unit via the dedicated radio frequency connection.

12. (Previously Amended) The cordless communication system of claim 11, wherein each of said remote units synchronizes to said central unit during communication with said central unit.

13. (Original) The cordless communication system of claim 11, wherein a first of said at least two remote units is capable of providing a request to said central unit for a direct connection with a second of said at least two remote units.

14. (Original) The cordless communication system of claim 13, wherein upon receiving a request from said first remote unit, said central unit assigns a dedicated communication channel for enabling direct communication between said first and second remote units, said second remote unit synchronizing to said first remote unit.

15. (Original) The cordless communication system of claim 11, wherein said radio communication comprises time division duplex connections utilizing a time division multiple access (TDMA) scheme.

16. (Original) The cordless communication system of claim 11, wherein said radio communication comprises a frequency hopping spread spectrum (FHSS) scheme and said central unit assigns the dedicated communication channel by assigning a specific hop sequence to selected ones of said at least two remote units.

17. (Original) The cordless communication system of claim 11, wherein said radio frequency communication comprises direct sequence spread spectrum (DSSS) scheme and said central unit assigns said dedicated communication channel by assigning a specific spreading code to selected ones of said at least two remote units.

18. (Original) The cordless communication system of claim 11, wherein said central unit provides an interface for interfacing the communication system with a network.

19. (Original) The cordless communication system of claim 18, wherein the network comprises at least one of a public switched telephone network (PSTN), an integrated services digital network (ISDN), the Internet, and an Intranet.

20. (Previously amended) A method for providing direct radio frequency communication between remote units in a cordless communication system, comprising: providing a request to a central unit for direct radio frequency communication between a first remote unit and a second remote unit; initiating a direct connection between the first remote unit and the second remote unit via a dedicated communication channel assigned to the first remote unit and the second remote unit by the central unit; and synchronizing the second remote unit to the first remote unit during direct communication between the first remote unit and the second remote unit via the dedicated communication channel.

21. (Original) The method of claim 20, further comprising: determining that communication between the first remote unit and the second remote unit has ended; and terminating the direct connection between the first remote unit and the second remote unit.

22. (Original) The method of claim 21, wherein determining that communication between the first remote unit and the second remote unit has ended comprises providing an indication to the central unit that communication between the first remote unit and the second remote unit has ended.

23. (Original) The method of claim 21, wherein initiating a direct connection between the first remote unit and the second remote unit comprises assigning the dedicated communication channel.

24. (Original) The method of claim 23, wherein radio communication within the cordless communication system comprises a frequency hopping spread spectrum (FHSS) scheme and assigning the dedicated communication channel comprises assigning a specific hop sequence to the first and second remote units.

25. (Original) The method of claim 23, wherein radio frequency communication within the cordless communication system comprises direct sequence spread spectrum (DSSS) scheme and assigning the dedicated communication channel comprises assigning a specific spreading code to the first and second remote units.

26. (Currently amended) The method of claim 24, wherein the specific hop sequence assigned to the selected ones of said at least two remote ~~units~~ units is orthogonal.

27. (Currently amended) The method of claim 25, wherein the specific spreading code assigned to the selected ones of said at least two remote ~~units~~ units is orthogonal.

28. (Currently amended) The cordless communication system of claim 7, wherein the specific hop sequence assigned to the selected ones of said at least two remote ~~units~~ units is orthogonal.

29. (Currently amended) The cordless communication system of claim 8, wherein the specific spreading code assigned to the selected ones of said at least two remote ~~units~~ units is orthogonal.

30. (Currently amended) The cordless communication system of claim 16, wherein the specific hop sequence assigned to the selected ones of said at least two remote ~~units~~ units is orthogonal.

31. (Currently amended) The cordless communication system of claim 17, wherein the specific spreading code assigned to the selected ones of said at least two remote ~~units~~ units is orthogonal.

32. (Currently amended) A cordless communication system, comprising:
a central unit;
a first remote unit for radio frequency communication with the central unit, the first unit synchronizing to the central unit during communication with the central unit; and
a second remote unit for radio frequency communication with the central unit and the first unit, the second remote unit synchronizing to the central unit during communication with the central unit,
wherein upon receiving a request from the first remote unit, the central unit assigns a dedicated radio frequency connection for enabling direct communication between said first remote unit and said second remote unit, the first remote unit functioning as a temporary central unit for the second remote unit during direct communication between the first remote unit and the second remote unit so that the second remote unit synchronizes to the first remote unit.

33. (Previously presented) The cordless communication system of claim 32, wherein the radio frequency communication employs a frequency hopping spread spectrum (FHSS) scheme and the central unit assigns the dedicated communication channel by assigning an orthogonal hop sequence to the first and second remote units during direct communication between the first remote unit and the second remote unit.

34. (Previously presented) The cordless communication system of claim 32, wherein the radio frequency communication employs a direct sequence spread spectrum (DSSS) scheme and the central unit assigns the dedicated communication channel by assigning an orthogonal spreading code to the first and second remote units during direct communication between the first remote unit and the second remote unit.